Input Set : A:\Pto.amc Output Set: N:\CRF3\10272000\1685343.raw 3 <110> APPLICANT: CHARNEAU, PIERRE ZENNOU, VERONIQUE PFLUMIO, FRANCOISE б SIRVEN, ARIDE DUBART, ANNE 9 <120> TITLE OF INVENTION: LENTIVIRAL TRIPLEX DNA, AND VECTORS AND RECOMBINANT 10 CELLS CONTAINING LENTIVIRAL TRIPLEX DNA 12 <130> FILE REFERENCE: 03495.0197 SEQUENCE LISTING C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/685,343 C--> 15 <141> CURRENT FILING DATE: 2000-10-11 17 <150> PRIOR APPLICATION NUMBER: 60/158,387 18 <151> PRIOR FILING DATE: 1999-10-12 20 <160> NUMBER OF SEQ ID NOS: 24 22 <170> SOFTWARE: PatentIn Ver. 2.1 24 <210> SEQ ID NO: 1 25 <211> LENGTH: 25 26 <212> TYPE: DNA 27 <213> ORGANISM: Artificial Sequence 29 <220> FEATURE: 30 <223> OTHER INFORMATION: Description of Artificial Sequence: MUTAGENESIS PRIMER BASED ON PLASMID pLAI3 33 <400> SEQUENCE: 1 34 caattttaaa agaagaggg ggatt 25 37 <210> SEQ ID NO: 2 38 <211> LENGTH: 43 39 <212> TYPE: DNA 40 <213> ORGANISM: Artificial Sequence 42 <220> FEATURE: 43 <223> OTHER INFORMATION: Description of Artificial Sequence: MUTAGENESIS PRIMER BASED ON PLASMID PLAI3 46 <400> SEQUENCE: 2 47 attcatccac aacttcaagc gccgcggtgg tattgggggg tac 43 50 <210> SEQ ID NO: 3 51 <211> LENGTH: 23 52 <212> TYPE: DNA 53 <213> ORGANISM: Artificial Sequence 55 <220> FEATURE: 56 <223> OTHER INFORMATION: Description of Artificial Sequence: PRIMER TO AMPLIFY NUCLEIC ACID ENCODING THE ENHANCED GREEN 57 58 FLUORESCENT PROTEIN 60 <400> SEQUENCE: 3 61 ceggatecce aceggtegee ace 23 64 <210> SEQ ID NO: 4 65 <211> LENGTH: 23 66 <212> TYPE: DNA 67 <213> ORGANISM: Artificial Sequence 69 <220> FEATURE:

DATE: 10/27/2000

TIME: 18:05:19

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/685,343

Input Set : A:\Pto.amc

Output Set: N:\CRF3\10272000\1685343.raw

70 <223> OTHER INFORMATION: Description of Artificial Sequence: PRIMER TO AMPLIFY NUCLEOTIDES ENCODING THE ENHANCED GREEN 71 72 FLUORESCENT PROTEIN 74 <400> SEQUENCE: 4 75 ccctcgagct agagtcgcgg ccg 23 78 <210> SEQ ID NO: 5 79 <211> LENGTH: 47 80 <212> TYPE: DNA 81 <213> ORGANISM: Artificial Sequence 83 <220> FEATURE: 84 <223> OTHER INFORMATION: Description of Artificial Sequence: PRIMER TO AMPLIFY pUCLTRRI-. 87 <400> SEQUENCE: 5 88 cggaattcgg atccgcggcc gcatcgatct tgtcttcgtt gggagtg 91 <210> SEQ ID NO: 6 92 <211> LENGTH: 40 93 <212> TYPE: DNA 94 <213> ORGANISM: Artificial Sequence 96 <220> FEATURE: 97 <223> OTHER INFORMATION: Description of Artificial Sequence: PRIMER TO AMPLIFY pUCLTRRI-. 100 <400> SEQUENCE: 6 101 cggaattcag ccgtctcgag agatgctgca tataagcagc 40 104 <210> SEQ ID NO: 7 105 <211> LENGTH: 38 106 <212> TYPE: DNA 107 <213> ORGANISM: Artificial Sequence 109 <220> FEATURE: 110 <223> OTHER INFORMATION: Description of Artificial Sequence: PRIMER TO AMPLIFY CPPT AND CTS OF pLAI3 111 113 <400> SEQUENCE: 7 114 gtggtcggcg ccgaattcac aaatggcagt attcatcc 38 117 <210> SEQ ID NO: 8 118 <211> LENGTH: 34 119 <212> TYPE: DNA 120 <213> ORGANISM: Artificial Sequence 122 <220> FEATURE: 123 <223> OTHER INFORMATION: Description of Artificial Sequence: PRIMER TO AMPLIFY CPPT AND CTS OF pLAI3 124 126 <400> SEQUENCE: 8 127 gtcgtcggcg ccccaaagtg gatctctgct gtcc 34 130 <210> SEQ ID NO: 9 131 <211> LENGTH: 38 132 <212> TYPE: DNA 133 <213> ORGANISM: Artificial Sequence 135 <220> FEATURE: 136 <223> OTHER INFORMATION: Description of Artificial Sequence: PRIMER TO AMPLIFY TRIPLEX SEQUENCE OF EF1 alpha PROMOTER ON 137 138 THE MATRIX plai

Input Set : A:\Pto.amc

Output Set: N:\CRF3\10272000\1685343.raw

140 <400> SEQUENCE: 9 141 gtcgtcggcg ccgaattcac aaatggcagt attcatcc 38 144 <210> SEQ ID NO: 10 145 <211> LENGTH: 39 146 <212> TYPE: DNA 147 <213> ORGANISM: Artificial Sequence 149 <220> FEATURE: 150 <223> OTHER INFORMATION: Description of Artificial Sequence: PRIMER TO AMPLIFY TRIPLEX SEQUENCE OF EF1 alpha PROMOTER ON 151 152 THE MATRIX plai 154 <400> SEQUENCE: 10 155 agcotcacga egegtateag ecaaagtgga totetgetg 39 158 <210> SEQ ID NO: 11 159 <21.1> LENGTH: 26 160 <212> TYPE: DNA 161 <213> ORGANISM: Artificial Sequence 163 <220> FEATURE: 164 <223> OTHER INFORMATION: Description of Artificial Sequence: PRIMER TO 165 AMPLIFY TRIPLEX SEQUENCE OF EF1 alpha PROMOTER ON 166 THE MATRIX pEFpgkneo 168 <400> SEQUENCE: 11 169 ctgatacgcg tcgtgaggct ccggtg 26 172 <210> SEQ ID NO: 12 173 <211> LENGTH: 26 174 <212> TYPE: DNA 175 <213> ORGANISM: Artificial Sequence 177 <220> FEATURE: 178 <223> OTHER INFORMATION: Description of Artificial Sequence: PRIMER TO 179 AMPLIFY TRIPLEX SEQUENCE OF EF1 alpha PROMOTER ON THE MATRIX pEFpgkneo 180 182 <400> SEQUENCE: 12 183 cgggatcctg tgttctggcg gcaaac 26 186 <210> SEQ ID NO: 13 187 <211> LENGTH: 23 188 <212> TYPE: DNA 189 <213> ORGANISM: Homo sapiens 191 <400> SEQUENCE: 13 192 ccctcgagct agagtcgcgg ccg 23 195 <210> SEQ ID NO: $14\,$ 196 <211> LENGTH: 23 197 <212> TYPE: DNA 198 <213> ORGANISM: Homo sapiens 200 <400> SEQUENCE: 14 201 ccggatecce accggtegee acc 23 204 <210> SEQ ID NO: 15 205 <211> LENGTH: 21 206 <212> TYPE: DNA 207 <213> ORGANISM: Artificial Sequence 209 <220> FEATURE:

Input Set : A:\Pto.amc

Output Set: N:\CRF3\10272000\1685343,raw

```
210 <223> OTHER INFORMATION: Description of Artificial Sequence: PRIMER FOR
          AMPLIFICATION OF pLAI3 VIRAL DNA
213 <400> SEQUENCE: 15
214 agaagaaatg atgacagcat g
                                                                       21
217 <210> SEQ ID NO: 16
218 <211> LENGTH: 17
219 <212> TYPE: DNA
220 <213> ORGANISM: Artificial Sequence
222 <220> FEATURE:
223 <223> OTHER INFORMATION: Description of Artificial Sequence: PRIMER FOR
         AMPLIFICATION OF pLAI3 VIRAL DNA
226 <400> SEQUENCE: 16
227 tgccagttct agctctg
                                                                       17
230 <210> SEQ ID NO: 17
231 <211> LENGTH: 20
232 <212> TYPE: DNA
233 <213> ORGANISM: Artificial Sequence
235 <220> FEATURE:
236 <223> OTHER INFORMATION: Description of Artificial Sequence: PRIMER FOR
         SYNTHESIS OF PROBE FOR PTRIPGFP VECTOR
239 <400> SEQUENCE: 17
                                                                       20
240 cagggacttg aaagcgaaag
243 <210> SEQ ID NO: 18
244 <211> LENGTH: 27
245 <212> TYPE: DNA
246 <213> ORGANISM: Artificial Sequence
248 <220> FEATURE:
249 <223> OTHER INFORMATION: Description of Artificial Sequence: PRIMER FOR
         SYNTHESIS OF PROBE FOR PTRIPGFP VECTOR
250
252 <400> SEQUENCE: 18
253 gcttgtgtaa ttgttaattt ctctgtc
                                                                       27
256 <210> SEQ ID NO: 19
257 <211> LENGTH: 7
258 <212> TYPE: PRT
259 <213> ORGANISM: Human immunodeficiency virus type 1
261 <220> FEATURE:
262 <221> NAME/KEY: PEPTIDE
263 <222> LOCATION: (1)..(7)
264 <223> OTHER INFORMATION: Partial HIV-1 cPPT sequence.
266 <400> SEQUENCE: 19
267 Asn Phe Lys Arg Lys Gly Gly
268 1
271 <210> SEQ ID NO: 20
272 <211> LENGTH: 19
273 <212> TYPE: DNA
274 <213> ORGANISM: Human immunodeficiency virus type 1
276 <400> SEQUENCE: 20
277 ttttaaaaga aaagggggg
                                                                       19
280 <210> SEQ ID NO: 21
```

Input Set : A:\Pto.amc

Output Set: N:\CRF3\10272000\1685343.raw

```
281 <211> LENGTH: 19
282 <212> TYPE: DNA
283 <213> ORGANISM: Artificial Sequence
285 <220> FEATURE:
286 <223> OTHER INFORMATION: Description of Artificial Sequence: MUTATION
287
          INTRODUCED INTO THE HIV-1 CPPT SEQUENCE
289 <400> SEQUENCE: 21
290 ttttaaacgc aaaggtggt
                                                                      19
293 <210> SEQ ID NO: 22
294 <211> LENGTH: 7
295 <212> TYPE: PRT
296 <213> ORGANISM: Artificial Sequence
298 <220> FEATURE:
299 <223> OTHER INFORMATION: Description of Artificial Sequence: MUTANT
          PEPTIDE OF HIV-1 CPPT SEQUENCE
302 <400> SEQUENCE: 22
303 Asn Phe Lys Arg Arg Gly Gly
304 1
307 <210> SEQ ID NO: 23
308 <211> LENGTH: 19
309 <212> TYPE: DNA
310 <213> ORGANISM: Artificial Sequence
312 <220> FEATURE:
313 <223> OTHER INFORMATION: Description of Artificial Sequence: MUTATION
314
          INTRODUCED INTO THE HIV-1 CPPT CODING SEQUENCE
316 <400> SEQUENCE: 23
317 ttttaaaaga agaggggg
                                                                      19
320 <210> SEQ ID NO: 24
321 <211> LENGTH: 19
322 <212> TYPE: DNA
323 <213> ORGANISM: Artificial Sequence
325 <220> FEATURE:
326 <223> OTHER INFORMATION: Description of Artificial Sequence: MUTATIONS
         INTRODUCED INTO THE HIV-1 CPPT CODING SEQUENCE
327
329 <400> SEQUENCE: 24
330 cttcaagcgc cgcggtggt
                                                                      19
```

VERIFICATION SUMMARY

DATE: 10/27/2000 TIME: 18:05:20

PATENT APPLICATION: US/09/685,343

Input Set : A:\Pto.amc
Output Set: N:\CRF3\10272000\1685343.raw

 $L:14 \ \, M:270 \ \, C\colon \ \, Current \ \, Application \ \, Number \ \, differs, \ \, Replaced \ \, Current \ \, Application \ \, Number \ \, L:15 \ \, M:271 \ \, C\colon \ \, Current \ \, Filing \ \, Date \ \, differs, \ \, Replaced \ \, Current \ \, Filing \ \, Date \ \, differs, \ \, Replaced \ \, Current \ \, Filing \ \, Date \ \, differs, \ \, Replaced \ \, Current \ \, Filing \ \, Date \ \, differs, \ \, Replaced \ \, Current \ \, Filing \ \, Date \ \, differs, \ \, Replaced \ \, Current \ \, Filing \ \, Date \ \, differs \ \, Current \ \, Filing \ \, Date \ \, Date \ \, Current \ \, Filing \ \, Date \ \,$